



Look out for hazards in your home.

**CHILDREN'S
ENVIRONMENTAL
HEALTH
PROTECTION
INITIATIVE**

*Children's Environmental
Health Protection Initiative*
Lincoln-Lancaster County
HEALTH DEPARTMENT
3140 "N" Street
Lincoln, NE 68510



funding provided by



PESTICIDES

ASTHMA

LEAD

**INDOOR
AIR QUALITY**

MERCURY

What is the purpose of the Children's Environmental Health Protection Initiative?

The Children's Environmental Health Protection Initiative, or CEHPI, is concerned about illness and disease in children caused by contact with environmental hazards and toxins. PREVENTING these exposures in children is the focus of the CEHPI. AWARENESS of environmental hazards is the first important step in preventing illness and disease. This brochure contains information on some of the environmental hazards and illnesses that affect children.

Who can I contact for more information?

If you have questions or concerns about children's environmental health please contact the CEHPI at 402 / 441-8000 or visit us on our website at

<http://interlinc.ci.lincoln.ne.us/city/health/environ/cehpi>

Very young children spend most of their time near the ground. They are closer to health hazards in dirt, on carpet and flooring. While in the same room, a child and an adult experience different environments, due to the space they are "living" in.

**Children
are at high risk for exposure
to environmental hazards
and toxins!**

Children's Play Area



Adult Environment



INDOOR AIR QUALITY



What are some common indoor air pollutants?

- ◆ Second-hand smoke
- ◆ Molds and mildew
- ◆ Dust mites, pet dander and cockroach droppings
- ◆ Odorless gases like carbon monoxide and radon
- ◆ Chemicals in new carpets
- ◆ Formaldehyde in building materials and furniture
- ◆ Gas and wood burning stoves, fireplaces, and kerosene heaters
- ◆ Household cleaners



Why should I be concerned about indoor air quality?

- ◆ Children spend about 90% of their time indoors.
- ◆ Newer homes are built with less air circulation.

How can I reduce indoor air pollutants?

- ◆ Never smoke around a child.
- ◆ Avoid using paint, stripper, oven cleaners and other household cleaners around children.
- ◆ Store chemicals and cleaning products out of children's reach.
- ◆ Empty garbage frequently and keep food covered and refrigerated.
- ◆ Prevent insects/pests from coming into your home, so you don't have to use pesticides.
- ◆ Repair leaky faucets and clean up standing water promptly to avoid pests, mold and mildew.
- ◆ If you have mold, get professional advice on how to remove it properly. Do not let children play or sleep in/near the area.
- ◆ Keep carpets clean and use a HEPA filter on your vacuum cleaner.
- ◆ Keep fireplace and wood stove flues clean and gas appliances in good repair.
- ◆ Have gas appliances and wood stoves inspected every year.
- ◆ Use a carbon monoxide detector and maintain it properly.



ASTHMA

What is asthma?

Asthma is a chronic disease of the lungs. It is the most common chronic disease among children in the United States. "Asthma attacks" can be caused by allergies, infections and/or exposure to environmental "triggers".

What things in the environment can "trigger" an asthma attack?

- ◆ Tobacco smoke
- ◆ Pet dander (*shedding skin attached to animal hair*)
- ◆ Cockroaches
- ◆ Dust mites
- ◆ Molds/mildew
- ◆ Trees, pollen and grasses
- ◆ Perfumes, colognes and aerosol sprays
- ◆ Ozone



**FIND THE TRIGGERS
IN YOUR HOME
TO REDUCE ATTACKS**

What can I do about asthma triggers?

- ◆ Never smoke indoors or near children.
- ◆ Clean carpets and flooring of dust and pet dander.
- ◆ Use a HEPA filter on your vacuum.
- ◆ When vacuuming, keep asthmatic children away to reduce contact with dust and other allergens.
- ◆ Keep pets out of bedrooms, off beds and away from floors where children play.
- ◆ Buy an allergen proof mattress cover and/or remove carpet and stuffed toys from the child's room.
- ◆ Wash all bedding (i.e. sheets, blankets, etc.) often in hot water.
- ◆ Fix leaky pipes and faucets.
- ◆ In high pollen seasons keep doors/windows closed.

**ALWAYS KEEP CARPETS,
FLOORS AND BEDROOMS CLEAN**

Why worry about asthma triggers when my child takes medication?

- ◆ Many asthma attacks can be prevented.
- ◆ Avoiding contact with asthma triggers is a very important part of an overall plan to improve asthma symptoms. However, reducing environmental exposures does NOT take the place of medicine.
- ◆ Keep a diary of your responses to asthma triggers for better asthma control. Share the diary with your health care provider.



LEAD

What is lead?

Lead is a metal that can be very dangerous, especially to children. Children, exposed to lead, may have problems with hearing, learning, behavior and/or their nervous systems.



**BEFORE 1978,
LEAD PAINT WAS
OFTEN USED
IN HOMES**

Sources of lead include:

- ◆ Interior and exterior paint (*in homes built before 1978*).
- ◆ Soil (*containing paint chips or dust*).
- ◆ Exposure to lead paint dust.
- ◆ Water flowing through lead pipes or lead solder used in water pipes.
- ◆ Some ceramic plates and glassware.
- ◆ Folk remedies, eye cosmetics, pottery glazes, painted toys and gasoline from some foreign countries (*i.e. Mexico, Middle East, India, Asia*).

How does lead enter a child's body?

The two most common ways are when children eat lead paint chips or breathe lead dust particles. The body cannot get rid of lead by itself and repeated contact to lead builds up, poisoning the child. A child with lead poisoning may not appear sick. Poisoning symptoms are stomach pain, headache, crankiness, fatigue or hyperactivity, poor appetite, vomiting, coma and/or death.

What can I do about lead?

Get your child's blood tested for lead between the ages of 6 months to 6 years old.

- ◆ Remove children from areas known to have lead.
- ◆ Wash hands with soap and water often.
- ◆ Wash, rinse and dry plastic toys frequently.
- ◆ Use a damp cloth, with a high-phosphate cleaner, when cleaning surfaces containing lead paint.
- ◆ Let water run and become cold before using it.
- ◆ Don't use hot water for drinking or cooking.
- ◆ When remodeling, don't remove lead-based paint yourself.



**LEAD IS ONE
OF THE BIGGEST
THREATS TO
YOUNG CHILDREN.**

MERCURY

What is mercury?

Mercury is a liquid at room temperature, but when a thermometer is broken and spilled it evaporates into the air becoming a deadly vapor. This vapor cannot be seen or smelled. Breathing in mercury can cause bronchitis, pneumonia and even death.

Pregnant women and mothers who are breastfeeding expose their child to mercury when they eat fish containing mercury. During this time, the child is at higher risk for mercury related health problems than his/her mother.



***EVEN IN SMALL AMOUNTS...
BREATHING IN MERCURY VAPORS
CAN CAUSE BIG HEALTH PROBLEMS***

How can I avoid Mercury Poisoning?

IN CASE OF A MERCURY SPILL:

- ◆ Call the Lancaster Co. Health Dept. at 441-8000.
- ◆ Keep everyone away from the spill.
- ◆ Open outside windows and close off the room.
- ◆ Turn off the central heating and air conditioning.
- ◆ Never vacuum mercury beads or area of spill.
- ◆ Do not touch mercury with your bare hands.

BE AWARE OF MERCURY IN FISH:

- ◆ Store-bought fish are safest because the FDA checks fish sold in stores and in restaurants.
- ◆ Cooking does not reduce the mercury in fish.
- ◆ Pregnant women and women who may become pregnant should avoid eating shark, mackerel, swordfish and tilefish.
- ◆ If you eat locally caught fish, see the state health department's fish advisory for mercury levels.
- ◆ Children and nursing mothers should limit the amount of shark, mackerel, swordfish and tilefish to no more than seven ounces per week.

***IDENTIFY ALL PRODUCTS
IN YOUR HOME CONTAINING
MERCURY AND REPLACE
THEM WITH MERCURY
FREE PRODUCTS***



PESTICIDES



What are pesticides and where are they found?

Pesticides are products made to control weeds, molds, rodents (i.e. mice and rats), bugs and insects. They are used in homes, schools, commercial and private buildings, lawns, gardens, along road ways, in parks and playgrounds. While they help control disease spread by bugs and rodents, they can also have toxic effects on humans. Insect repellent sprays and lotions are also pesticides.

PESTICIDE USE HAS BEEN ASSOCIATED WITH CERTAIN CHILDHOOD CANCERS, FLU-LIKE SYMPTOMS, NERVE AND MUSCLE DAMAGE.

What damages can pesticides cause?

Pesticides can cause illnesses and injuries to children, especially if they are exposed to the chemicals over long periods of time. Pesticides can be eaten/swallowed, absorbed through the skin, or inhaled.



Cleanliness is important in preventing pest and rodent problems:

- ◆ Store food in closed containers.
- ◆ Fix water leaks immediately.
- ◆ Consider nonchemical options to control weeds and pests.

Remove children and toys from the area before using pesticides. DO NOT spray pesticides in or around sand boxes. After applying to lawn and garden, keep children and pets away for time shown on label. Proper ventilation is needed with pesticides approved for indoor use.

DEET is the active ingredient in repellents (i.e. bug spray/lotion).

- ◆ DO NOT use on infants.
- ◆ Use products with no more than 10% DEET.
- ◆ DO NOT let children apply it themselves.
- ◆ Spray can be applied to clothing.
- ◆ Wash after use.



PESTICIDES SHOULD BE STORED WHERE CHILDREN CANNOT REACH THEM.





We are not little adults. We breathe more air, drink more water, and eat more food, pound for pound, than adults. When we play, we crawl and put things in our mouths. This could increase our exposure to potential pollutants.

Our body systems are still developing, and are less able to metabolize, detoxify, and excrete these pollutants compared to adults. As a result, we are more vulnerable to many toxic environmental pollutants.

For more information contact the

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